

100 →

```
<!--ELEMENT purchases (purchase*)-->
<!--ELEMENT purchase
<!--ATTRIST seller
<!--ELEMENT seller
<!--ATTRIST buyer
<!--ELEMENT item
<!--ATTRIST item
      (purchase*)
      (seller, buyer)
      ID ID location CDATA name CDATA>
      (item*)
      ID ID location CDATA name CDATA>
      (item*)
      name CDATA manufacturer CDATA>
```

**Figure 1**  
**(Prior Art)**

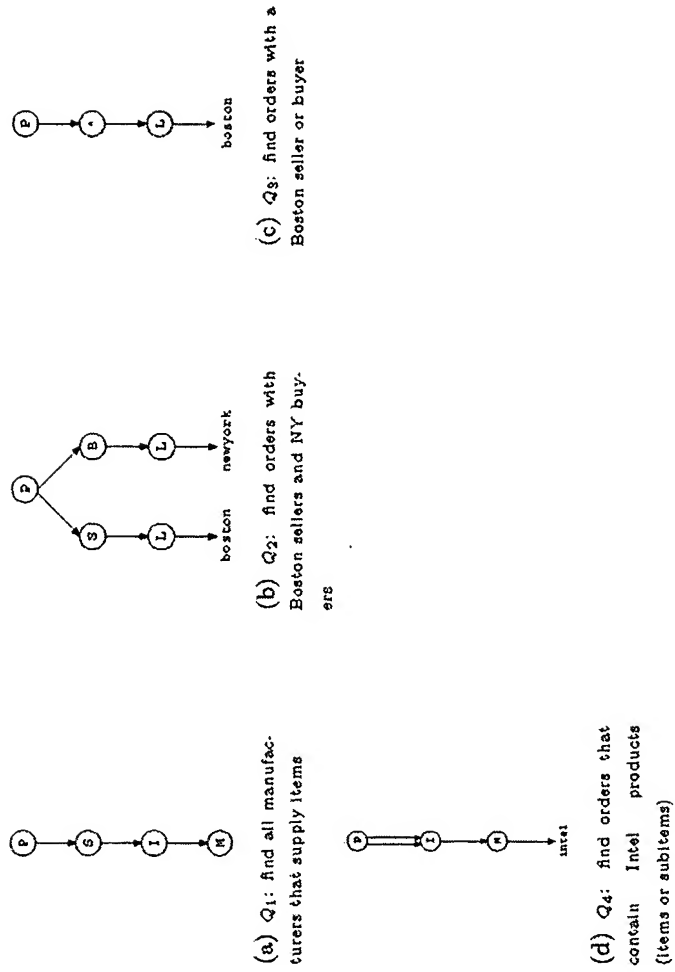


Figure 2  
(Prior Art)

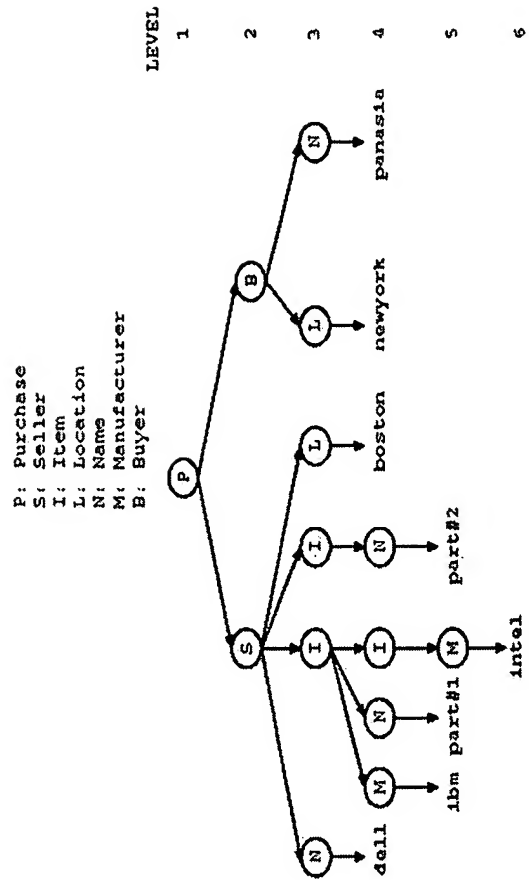


Figure 3

$$\mathcal{D} = \begin{aligned} & \overline{(P, \epsilon), (S, P), (N, PS), (v_1, PSN), (I, PS), (M, PSI),} \\ & \overline{(v_2, PSIM), (N, PSI), (v_3, PSIN), (I, PSI), (M, PSII),} \\ & \overline{(v_4, PSIIM), (I, PS), (N, PSI), (v_5, PSIN), (L, PS),} \\ & \overline{(v_6, PSL), (B, P), (L, PB), (v_7, PBL), (N, PB), (v_8, PBN)} \end{aligned}$$

Figure 4

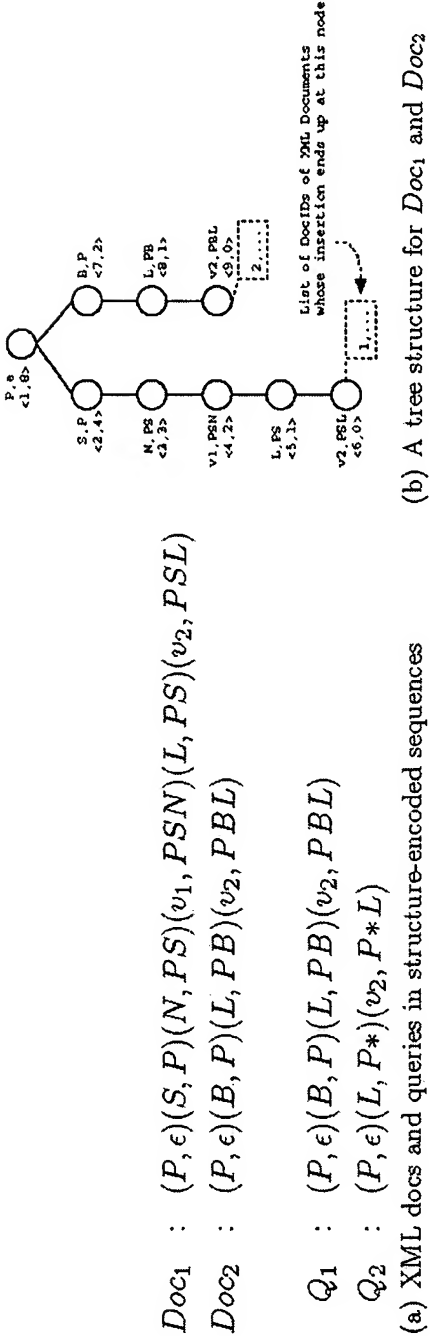


Figure 5

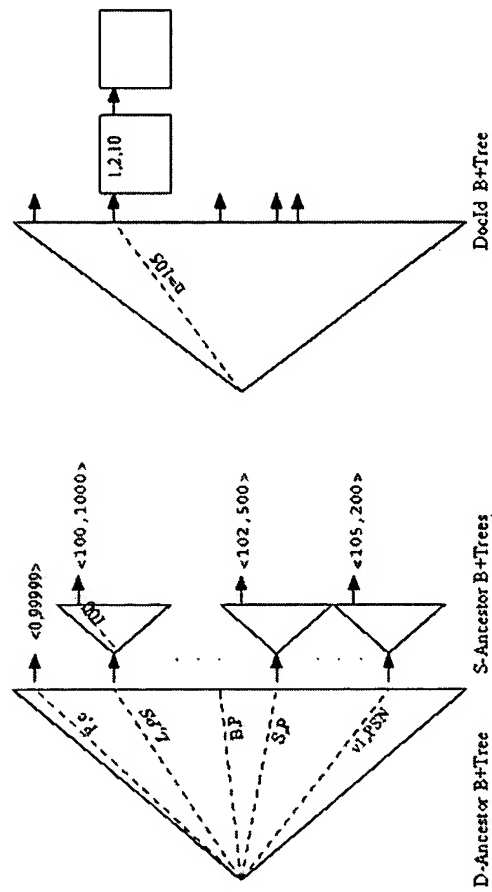


Figure 6

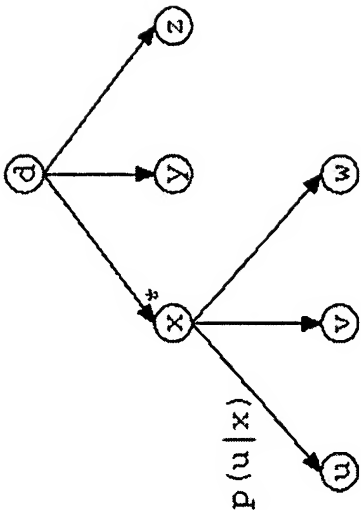


Figure 7

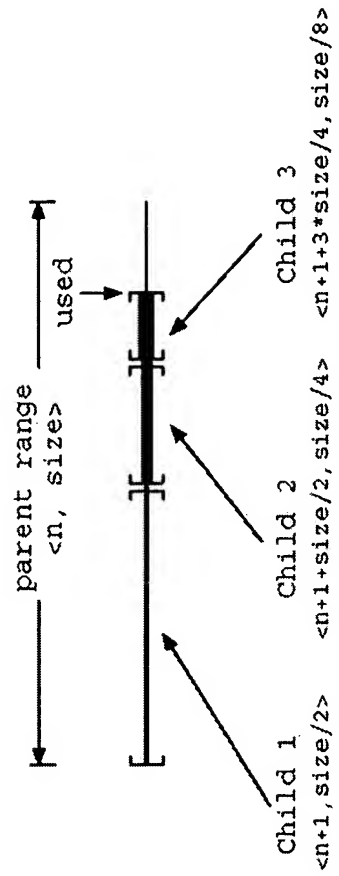


Figure 8

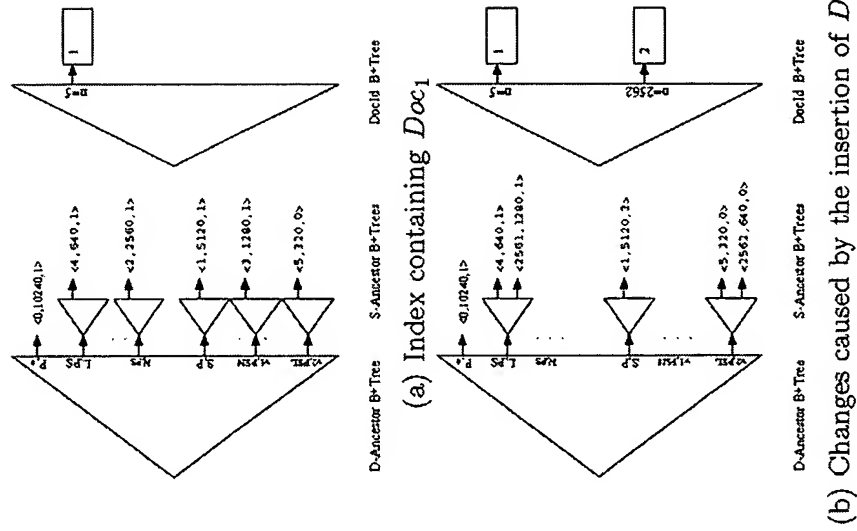


Figure 9